VERMONT ENVIRONMENTAL BOARD
10 V.S.A. Chapter 151

RE: Village of Waterbury Water Commissioners by Dana J. Cole-Levesque, Esq. Paige House, P.O. Box 417 Bethel, VT 05032

Findings of Fact, Conclusions of Law, and Order
Declaratory Ruling #227

This decision pertains to a petition for a declaratory ruling concerning proposed improvements to the Village of Waterbury water system. The project consists of construction of a new water treatment facility, new wells, new water transmission lines, replacement of water transmission lines, an access road to the new treatment plant, and an access road to the new wells. As is explained below, the Board has determined that a permit is not required prior to commencement of construction on the project pursuant to 10 V.S.A. Chapter 151 (Act 250).

I. SUMMARY OF PROCEEDINGS

On December 4, 1989, at the request of the Village, Assistant District #5 Coordinator Christine Melicharek signed a project review sheet concerning various improvements to the Village water system, including construction of a water treatment facility, reservoir improvements, construction of wells, and installation of yard piping and a water main. The project review sheet states that no permit is required for the proposed improvements to the Village water system pursuant to 10 V.S.A. Chapter 151 (Act 250). The project review sheet also states in capital letters that it is an advisory opinion.

On January 25, 1990, District #5 Coordinator Edward Stanak wrote to William Shepeluk, Village Manager, and P. Howard Flanders, Chairman of the Village Water Commission, requesting information on improvements to the Village water system. On February 5, the District Coordinator wrote again to Mr. Flanders, stating that additional information was needed because limited information was provided to the Assistant Coordinator at the time the December 1989 project review sheet was issued. The District Coordinator also discussed the question of the Village's reliance on the December project review sheet, apparently in response to a statement made by Mr. Flanders in a January 30 letter to the District Coordinator.

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On March 13, 1990, Darrel and Florilla Ames filed a petition for a declaratory ruling with the Board. The petition asserts that inaccurate information concerning the project's scope was provided by the Village to the Assistant Coordinator. The petition also asserts that the project review sheet's statement that no Act 250 permit is required is incorrect. The Ameses further state that their property adjoins prbperty on which the proposed improvements to the Village water system will be constructed and that a water transmission line to be constructed as part of the proposed project will run along an easement which goes through property which the Ameses own.

On March 16, 1990, Jeffrey M. McDonald requested, on behalf of the Village, a "project review" by the District Coordinator. On March 23, the District Coordinator wrote to Mr. McDonald, stating that he could not perform such a review because a petition for a declaratory ruling on this matter had already been filed with the Board. In his letter, the District Coordinator noted that his office had made efforts to solicit details concerning this project during January and February 1990 "in order to verify whether a jurisdictional ruling made in a December 1989 Project Review Sheet should stand or be altered." The letter states that the District Coordinator was unable to obtain this supplemental information from the Village.

On March 23, 1990, Crea and Philip Lintilhac filed a petitionfor a declaratory ruling. The petition states that the Lintilhacs own property nearby and north of property on which project improvements are to be located. The petition also states that the Lintilhacs own property through which an easement runs which will be used for the installation of a transmission line as part of the proposed project.

On March 27, 1990, the Assistant Coordinator signed a project review sheet which stated that an Act 250 permit is required for the proposed construction by the Village of a wastewater disposal system for a water treatment plant to be located on Barnes Hill Road in the Village. This project review sheet was prepared at the request of Faye Cliche, a permit specialist with the Agency of Natural Resources.

On April 13, 1990, the Village filed a petition for a declaratory ruling with respect to the March 1990 project review sheet. The Village requested consolidation of its petition with the proceedings on the previously-filed petitions.

On May 4, 1990, the Lintilhacs filed a memorandum of law asserting that an Act 250 permit is required for the proposed project and that the doctrine of equitable estoppel does not operate to bar Act 250 jurisdiction.

On May 7, 1990, Board Chairman Stephen Reynes convened a prehearing conference in Waterbury. On May 31, 1990, the Board issued a prehearing conference report which, among other things, included preliminary rulings which Chairman Reynes made at the prehearing conference granting requests for party status by the Ameses, the Lintilhacs, and Milton and Joan Beard.

The prehearing conference report established two parallel procedures to expedite this matter. The first track was to have the parties try to enter into a stipulation of facts which could then be the basis of oral argument. The second track was to require filing of written testimony and to have an evidentiary hearing by a Board hearing panel in event that a stipulation could not be reached.

At the prehearing, a date for filing a stipulation of June 7, 1990 was set. On June 8, the Village filed a letter stating that parties had not yet been able to agree on a stipulation. Consequently, on June 15, the Board issued a memorandum stating that the Board would proceed on the second track and convene an evidentiary hearing.

On June 18, 1990, the Village filed a statement of facts with attached exhibits. The statement was signed only by the Village. On that date, the Lintilhacs filed a letter stating that they wished to withdraw as parties in the proceeding. On June 20, the Board issued a notice of hearing and a memorandum stating that the statement of facts would be treated as prefiled testimony and that the Village would need to have a witness or witnesses available at the hearing to testify concerning the statement and to answer questions which the hearing panel might have. On June 25, the Ameses filed a letter stating that they wished to withdraw their petition for a declaratory ruling in this matter. On June 29, the Village filed a motion to dismiss the declaratory ruling request and a memorandum of law in support of that request, and a list of witnesses.

A Board hearing panel convened a hearing in Waterbury on July 6, 1990, with the Village participating. The Beards and Ameses attended the hearing but stated that they were only attending as observers and did not seek to participate.

After taking testimony and hearing argument from the Village, the panel recessed the hearing pending a review of the record, deliberation, and preparation of a proposed decision.

Following the hearing, the panel performed investigation pursuant to Rule 20. On August 1, 1990, the panel issued a memorandum taking notice of various documents. The Village requested a hearing to rebut some of the evidence contained in those documents. On September 18, the Village submitted prefiled testimony. On September 25, the panel reconvened a hearing in Waterbury, with the Village participating. After taking testimony, the panel recessed the hearing pending submission of proposed findings and conclusions, review of the record, deliberation, and preparation of a proposed decision. The Village submitted proposed findings on October 5.

A proposed decision was sent to the parties on December 21, 1990. Parties were offered an opportunity to file written comments and to request oral argument before the full Board. On January 17, 1991, the Village filed written comments. The Village stated that the letter by Mr. McDonald referenced above was filed concerning a separate water system known as the "Luce Water System." The Village also attached a sworn affidavit. The Board deliberated on January 24 in Thetford and on February 1 by telephone. On February 1, the Board declared the record complete and adjourned the hearing. This matter is now ready for a decision. To the extent any proposed findings of fact and conclusions of law are included below, they are granted; otherwise, they are denied.

II. ISSUES

The issues before the Board are:

1. Whether an Act 250 permit is required for the proposed project because the project is, in and of itself, a development pursuant to 10 V.S.A. § 6001(3). The Village asserts that the proposed project is not a development because it involves less than 10 acres of land.

2. Whether an Act 250 permit is required because the proposed project is a substantial change to a pre-existing development pursuant to 10 V.S.A. § 6081(b) and Board Rules 2(G) and (0). The Village asserts that the Village water system is a pre-existing development and that the proposed project would not constitute a substantial change to that

development. The Village also argues that newly-enacted legislation (H.901) contains an exemption from the definition of substantial change which would apply to the proposed project. H.901 added 10 V.S.A. § 6081(d), which provides that some municipal projects are not to be considered substantial changes, including "essential municipal water works enhancements that do not expand the capacity of the facility by more than 10 percent." 1989 Vt. Laws No. 276 § 17 (Adj. Sess., effective July 1, 1990). In addition, H.901 added 10 V.S.A. § 6081(e) to read:

> For purposes of this section, the replacement of water and sewer lines, as part of a municipality's regular maintenance or replacement of existing facilities, shall not be considered to be substantial changes and shall not require a permit as provided under subsection (a) of this section, provided that the replacement does not expand the capacity of the relevant facility by more than 10 percent.

As indicated in the prehearing conference report, the Village has also raised the issue of whether the judicial doctrine of equitable estoppel would bar the State of Vermont from enforcing the requirement to obtain an Act 250 permit with respect to the proposed project. Because the Board has determined that no permit is required, the Board declines to address this issue.

III. FINDINGS OF FACT

1. The water system for the Village of Waterbury (the system) was created in 1896. The system originally consisted of surface water intakes from Tyler and Merriam Brooks in Stowe and a series of springs located at the foot of the Worcester Mountain Range. These surface waters still supply water to the system and will continue to do so in the future.

2. In 1937, the Village developed an additional water supply known as the Park Street well. In 1951, the Village purchased an additional water supply known as the Demeritt well. These wells have been used primarily to provide water capacity to fight fires and occasionally have been used to supply drinking water when the surface water sources referred to in finding 1, above, have been insufficient due to drought.

3. Prior to June 1, 1970, the Village constructed a water treatment facility located at the headwaters of

Thatcher Brook. The treatment facility includes a microstrainer and hypochlorinator.

4. In 1977, the Village constructed a storage reservoir located on Blush Hill, which holds approximately 1,400,000 gallons of water.

5. The existing Village water system also includes water transmission pipelines located within existing rights-of-way owned by the Village. These rights-of-way run from the treatment facility at the headwaters of Thatcher Brook for approximately five miles to the storage reservoir on Blush Hill.

6. The Village water system also includes a pipeline distribution system to individual customers within the Village.

7. The total source capacity of the present system is 1,167,000 gallons per day (gpd) if the Park Street and Demeritt wells are included. This figure is based on so-called "safe" yields from the Village's various sources of water supplies. "Safe" yield refers to that yield from a water supply which is available dependably throughout all periods of the year, including those periods of the year which are typically the driest. The yields from the present sources of water supply are as follows: the Park Street well, 504,000 gpd; the Demeritt well, 576,000 gpd; and the surface Water intakes from Tyler and Merriam Brooks, 87,000 gpd.

8. The original Village water system involved more than ten acres of land.

9. In 1977, the Park Street and Demeritt wells were reported to have levels of manganese in the water at levels above standards promulgated pursuant to the federal Safe Drinking Water Act. In addition, the Demeritt well was found to have levels of iron which exceeded federal standards for drinking water.

10. On July 20, 1988, Winslow H. Ladue, Chief of the Water Supply Program for the Vermont Department of Health (the Department), sent a letter to the Village of Waterbury Water Commission. This letter addressed those steps which would be necessary for the Village to come "in full compliance with the Safe Drinking Water Act 1986 Amendments for surface water treatment and provide adequate amounts of water for future

growth." The letter contains a schedule for reaching compliance, including a schedule for testing of current water supplies and a design for surface water treatment plant improvements. The letter states: "Failure to progress towards the improvements may result in further action by the Department of Health."

11. In August 1988, the Park Street well was found to contain levels of benzene in the water which exceed federal drinking water standards. The Demeritt well was not found to contain benzene. The Village maintains that untreated water from the Park Street well can still be used for drinking for short periods despite the presence of benzene. The Village bases this conclusion on the federal benzene standard which was developed assuming lifetime exposure (70 years). For a short period such as one to six months, the Village believes that Park Street well water can be consumed without long term health effect.

12. Regardless of whether water from the Park Street and Demeritt wells can be drunk without risk, the water from those wells is useful for fire-flow.

13. The existing Village water treatment plant does not meet current federal safe drinking water regulations. The current microstrainer and hypochlorinator are insufficient to meet current standards. The current standards require additional chemical and filtration treatment of water supplies, as well as use of sedimentation treatment processes.

14. The highest historic average day demand for use of Village water is 600,000 gpd. Since this high point, several significant water users in the Village have either discontinued operations or decreased their demand. Currently, the average daily water use in Waterbury is approximately 325,000 gpd. The average use is projected to increase to approximately 500,000 gpd in the year 2014. The maximum daily demand on the village water system is projected to reach approximately 880,000 gpd by the year 2014.

15. The Village proposes to cease using the existing treatment plant for purposes of water treatment, although the plant building may be used as a storage facility in the future, and to construct a new

treatment facility downstream from the site of the existing treatment plant. The new facility will be located at the site of an abandoned gravel pit near Barnes Hill Road in Waterbury. Approximately four acres of land will be physically disturbed as part of the construction of this facility. The tract of land on which the facility will be located is approximately 13 acres. The new treatment plant will have a design capacity of approximately 500,000 gpd average daily demand, and of 880,000 gallons maximum daily demand. An access road from Barnes Hill Road will be constructed to the facility.

16. The new treatment plant will be located on a tract of land through which runs the existing pipeline from the current treatment plant to the reservoir.

17. The Village could decide to treat its existing contaminated sources of water; instead, the Village has decided to find more pristine sources. The Village has drilled five new wells to supply water to the Village water system. Wells #1 and #1A are located north of the existing treatment plant and will be connected to the Village water system through existing pipelines. Wells #2, #3 and #4 are located south of the existing treatment plant, between the existing plant and the site of the proposed new plant. These wells will be connected to the existing pipeline running from the existing plant to the reservoir through new pipeline totalling approximately 2,100 feet in length.

18. The estimated safe yield of new well #1 is approximately 502,560 gpd. The estimated safe yield of new well #1A is 201,600. The estimated safe yield of new well #3 is approximately 213,000 gpd. The estimated safe yield of new wells #2 and #4 together is approximately 151,200 gpd. Including the Tyler and Merriam Brook sources which will continue to be used, the total yield from these sources of water will be approximately 1,068,360 gpd following completion of the proposed project.

19. The Village will replace a large portion of the existing pipeline running from the existing treatment plant to the reservoir. Approximately 25,600 linear feet of this pipeline will be replaced. The reason for the replacement is that the current pipeline is less than 12 inches in diameter, and needs to be replaced with 12 inch diameter pipes in order to meet requirements'for adequate flow rate. The pipes which

are being replaced run from the existing treatment plant to the site of the proposed plant and thence south along Barnes Hill Road to the Kneeland Flat area, which is located near the intersection of Barnes Hill and Loomis Hill Roads. Existing pipes extend south of this area to the Blush Hill Reservoir, but no pipes will be replaced between the Kneeland Flat area and the reservoir. The rights-of-way for the existing pipes which are being replaced will be used for the replacement pipes. All of the replacement will occur within these rights-of-way.

20. Approximately 2,000 linear feet of pipe will be constructed in the area of the proposed treatment plant which will connect the treatment plant to the existing lines which run nearby and which are going to be replaced.

21. The new pipeline to the wells will be constructed within a 50 foot right-of-way to be owned by the Village. The replacement pipes will be located in easements with undefined widths which are owned by the Village. During construction of the replacement and new pipes, the disturbed area along the rights-of-way will vary from 20 to 50 feet in width.

22. The total length of all proposed new and replacement pipes is 29,700 linear feet. If multiplied by the approximately 50-foot maximum width of the disturbed area along the length of the pipelines, the total square footage of the disturbed area is 1,485,000 square feet or approximately 34 acres, of which approximately 29 acres would involve the replacement pipes and approximately 4.5 acres would involve the extension beyond the existing pipe corridor. In actuality, the disturbed acreage would be less because the disturbed area along the right-of-way would vary from 20 to 50 feet in width as above, rather than all being 50 feet in width of disturbed area.

23. After the new wells are connected to the Village water system, the Village will physically disconnect the Park Street and Demeritt wells from the system by removing a short stretch of pipeline which connects those wells to the system. If it is necessary to use the Park Street and Demeritt wells for fire-flow, the Village will insert a connector to replace the removed pipeline.

24. The Village of Waterbury plans to search for additional sources of water supply in the future. At present, no such sources have been identified. The Village will need to identify such sources in the future in order to meet demand.

25. The proposed treatment plant includes a 700,000 gallon clear well which will be used to store water for purposes of fire protection. This represents a 50 percent increase in storage capacity for the Village's water system. (See finding 4, above.)

26. The Board infers that the actual disturbed area for the new wells will be less than one acre. The Department regulations require the creation of "wellhead protection areas." These are zones around wells in which land uses will be restricted to avoid contamination of wells. There are two components to the wellhead protection areas in this case: (1) an immediate circular or "isolation" zone with a 200-foot radius around each well which the Village will own and control, and (2) larger areas around each well which the Village will not necessarily own but in which land uses will still be restricted to avoid contamination. For the five wells, the isolation zones will total approximately 14 acres, and all construction will occur within those zones. The larger wellhead protection area for new wells #1 and #1A will include approximately 1,100 acres, of which the Village will own 500 acres (including the isolation zone). The larger wellhead protection area for wells #2, #3, and #4 will include approximately 1,115 acres, of which the Village will own approximately 30 acres (again including the isolation zone).

27. The Village will construct approximately 1,200 feet Of new road to provide access to new wells #2, #3, and #4. The road will be private and used only for well access. Assuming a twenty-foot right-of-way, the road will involve approximately half an acre. The remaining wells can be reached from existing roads.

28. The Village's water system project has evolved through the planning stages. The Village states that a number of items which were originally included in the project are no longer included. For example, the Village no longer plans to create an infiltration gallery on Thatcher Brook as a source of water supply nor to construct a new water distribution line of 9,450 linear feet in length.

29. On November 28, 1989, Kathleen D. Williams, an engineer with Dufresne-Henry, wrote to Assistant District #5 Coordinator Christine Melicharek. Ms. Williams requested that the Assistant Coordinator issue a project review sheet stating whether an Act 250 permit is required for proposed improvements to the Village's water treatment facility. The components of the project specified in the letter were: 3.2 acres of land to be involved with a new treatment facility; water sources consisting of "Tyler Brook and Merriam Brook and miscellaneous rock wells," an 0.7 mgd clear well, an access road, "reservoir improvmements," "yard piping," and replacement of 32,000 linear feet of water main. No mention was made of how many new wells there would be, of the existing Park Street and DeMerrit wells or whether those wells would continue to be used, of the wellhead protection areas, of the new pipes planned from the new wells to the existing system, or of the fact that the project includes two new access roads (one to the new plant and the other to new wells #2, #3, and #4). On the basis of the information provided in the November 28 correspondence, the Assistant Coordinator signed a project review sheet on December 4, 1989, finding that no Act 250 permit is required for the proposed project.

30. Construction of the proposed project will involve use of trucks and heavy machinery with standard back-up warning signals. Truck traffic will be increased in the vicinity of the construction areas, some of which are near existing residences. Calcium chloride will be added to dirt roads which will be used by construction-related traffic. Construction activities for this project will have the potential to generate dust. Construction activities also will have the potential to create soil erosion, particularly because some of the construction will occur in areas which have steep slopes. Following construction, odors may occur because drying beds will be used during the treatment process. The treatment plant will use an on-site septic system. Chemicals will be used during the treatment process which will be placed in an on-site holding tank after use and prior to disposal.

IV. CONCLUSIONS OF LAW

A. Motion to Dismiss

The Village filed a motion to dismiss on June 29, 1990. The basis for the Village's motion is that no permit is required for the proposed project pursuant to the

recently-enacted exemptions at 10 V.S.A. § 6081(d) and (e). The Board does not believe that it is appropriate to dismiss a declaratory ruling request on this basis. The purpose of a declaratory'ruling proceeding is to determine the applicability of statutes, rules, and orders. 3 V.S.A. § 808; Rule 3(C). If the Board determines that no permit is required, it issues a declaratory ruling to that effect. Accordingly, the Board treats the motion to dismiss as a proposed conclusion of law that no permit is required, with supporting memorandum.

B. Scone of the Board's Inquiry

In past decisions involving whether Act 250 applies to municipal projects, the Board has evaluated two issues. First, the Board has analyzed whether the project in and of itself meets the definition of development set forth at 10 V.S.A. § 6001(3). Second, the Board has evaluated whether the project constitutes a substantial change to a pre-existing development pursuant to 10 V.S.A. § 6081(b). See, e.g., Re: Town of Rutland, Declaratory Ruling #207 at 1, 4 (May 5, 1989).

In its motion to dismiss, the Village argues that no permit is required for the proposed project because the project meets the elements of the recently enacted exemptions at 10 V.S.A. § 6081(d) and (e). This argument implies that the recently enacted exemptions go beyond the issue of whether a proposal constitutes a substantial change to a pre-existing development and exempt municipal projects which themselves meet the definition of development.

The Board does not believe that the legislature intended such a result. 10 V.S.A. § 6081(d) begins with the words:

> For purposes of this section, the following municipal projects shall not be considered to be substantial chancres, regardless of the acreage involved, and shall not require a permit as provided under subsection (a) of this section
> . . . .

(Emphasis added.) 10 V.S.A. § 6081(e) begins with similar language. Further, as quoted in Section II, above, each of these subsections refers to revisions to facilities which do not expand the capacity of facilities by more than 10 percent. Thus, the language of the exemptions indicates an intent to apply to changes to facilities.

In addition, these words must be evaluated in light of two principles of statutory construction. First', exemptions are to be construed narrowly so as not to override the purpose of the statute. Re: WAJA, Inc., Declaratory Ruling #162 at 3 (Oct. 4, 1984), citing Edward B. Marks Music Corp. v. Colorado Magazine, Inc., 497 F.2d 285, 288 (10th Cir. 1974). Second, the meaning of statutory language is to be evaluated in view of the statute's overall purpose. In re A.C., 144 Vt. 37, 42 (1984).

The purpose of Act 250 is to "protect and conserve the lands and the environment of the state and to insure that these lands and environment are devoted to uses which are not detrimental to the public welfare and interests. 1969 Vt. Laws No. 250, § 1 (Adj. Sess.); In re Eastland, 151 Vt. 497, 499 (1989). To achieve this purpose, projects which meet the statutory definitions of development and subdivision are required to comply with standards regarding environmental, social, and fiscal impacts. 10 V.S.A. § 6086(a); Re: Homestead Desian, Inc., #4C0468-1-EB, Findings of Fact, Conclusions of Law and Order at 4 (Sept. 6, 1980). There are a few exemptions to this requirement. For example, 10 V.S.A. § 6081(b) exempts developments commenced prior to June 1, 1970 and completed by March 1, 1971, unless there is a "substantial change" to those developments. This is the only other place in the statute in which the phrase "substantial change" is mentioned, and it occurs almost immediately prior to subsections (d) and (e).

In view of the purpose of the statute, the language of the new amendments, and their placement near the previously existing substantial change provision, the Board believes that the new amendments apply only to the question of whether a municipal project constitutes a substantial change to a pre-existing development. A permit is still required for a municipal project if the project, standing on its own, is a development as Act 250 defines that term. To rule otherwise would frustrate the legislative intent that developments meet the standards of Act 250.

c. Develonment

10 V.S.A. § 6001(3) defines development in relevant part to mean:

> [T]he construction of improvements on a tract of land involving more than 10 acres which is to be used for municipal or state purposes. In computing

> the amount of land involved, land shall be included which is incident to the use such as lawns, parking areas, roadways, leaching fields and accessory buildings.

In prior declaratory rulings, the Board has stated that land is involved with municipal or state projects: (1) if the land will be physically changed as a result of those projects, or (2.) if a relationship exists between that land and the land which is actually used in the construction of improvements, such that there is a demonstrable likelihood that the impact on the values sought to be protected by Act 250 will be substantially affected by reason of that relationship. Re: Citv of Montpelier, Declaratory Ruling #220 at 7, 10 (July 13, 1990); Re: Town of Rutland, Declaratory Ruling #207 at 5-6 (May 5, 1989).

The following potentially involved lands are at issue in this matter: (1) the four acres at the new treatment plant site; (2) the approximately four and a half acres of land associated with new pipeline construction; (3) the 29.3 acres of land associated with replacement of old pipes by pipes of larger diameter; (4) the one-half acre of land associated with the new access road to wells #2, #3, and #4; (5) the 14 acres of isolation zones around the new wells, and (6) the over 2,000 acres of other land associated with the wellhead protection areas.

The land at the treatment site and the land involved with the new pipes and the new access road are unquestionably involved lands. The amount of land involved with these improvements is no more than nine acres, and possibly less.

Less than an acre of land will actually be disturbed for the creation of the new wells: The remainder of the land in the isolation zones will not be physically changed. Its use will be restricted to protect the wells from contamination, thereby rendering unlikely any effect on the values protected by Act 250. Thus, less than an acre of the isolation zones is involved land.

The other land (over 2,000 acres) associated with the wellhead protection areas is not involved land. No physical change will occur to these areas. Further, since land uses in those areas will be restricted to avoid well contamination, there will be no effect on the Act 250 values.

The Board concludes that the replacement pipes are not involved land. In this case, the replacement pipes are not properly part of the analysis of whether the proposed project is a development in and of itself. This is because these pipes are replacing existing pipes at a facility which the Board concludes is an exempt pre-existing development, as set forth below. The replacement pipes will be constructed within the rights-of-way for the existing pipes. Thus, the replacement pipes should be evaluated only as to whether they would constitute a substantial change to that development. In contrast, the new treatment facility, wells, pipeline, and access road are all new improvements.

Based on the above, the Board concludes that the proposed project is not a development because it involves less than ten acres.

D. Pre-existing Development

The requirement to obtain a permit does not apply to "development which is not also a subdivision, which has been commenced prior to June 1, 1970, if the construction will be completed by March 1, 1971." 10 V.S.A. § 6081(b).

Board Rule 2(A)(5) provides in relevant part that a project is a development if it consists of "[a]ny construction of improvements which will be a substantial change of a pre-existing development ...."

Rule 2(O) states:

> "Pre-existing development" shall mean any development in existence on June 1, 1970, and any development which was commenced before June 1, 1970 and completed by March 1, 1971.

In prior declaratory rulings, the Board has stated that the issue of whether development is pre-existing is evaluated in terms of whether the development, if built today, would meet the definition of development at 10 V.S.A. § 6001(3), quoted above. Re: Village of Ludlow, Declaratory Ruling #212 at 8 (Dec. 29, 1989).

If built today, the Village's existing water treatment system would meet the definition of development. It consists of improvements constructed for a municipal purpose. It involves over ten acres of land. It was in existence on June 1, 1970. Accordingly, the existing system qualifies as a pre-existing development, and a permit is not required unless, as explained below, a substantial change has occurred or is planned with respect to the system.

E. Substantial Chancre

10 V.S.A. § 6081(b) states that the Act 250 permit requirement applies "to any substantial change in [an] excepted subdivision or development." As noted above, the term substantial change does not apply to municipal projects which meet the elements of 10 V.S.A. § 6081(d) and (e).

Concerning substantial change, Rule 2(G) provides:

> "Substantial change" means any change in a development or subdivision which may result in significant impact with respect to any of the criteria specified in 10 V.S.A. section 6086(a)(l) through (a)(10).

This rule was promulgated prior to the exemptions set forth at subsections 6081(d) and (e), and therefore is modified by those subsections.

The Board's substantial change test has been upheld by the Vermont Supreme Court. In re Orzel, 145 Vt. 355, 360-61 (1985). The Board has typically analyzed the issue of substantial change using a two-part test: (1) it has determined whether there has been or is planned a cognizable physical change to the project and (2) it has determined whether changes to the project have the potential for significant impacts with respect to any one of the ten Act 250'criteria at 10 V.S.A. § 6086(a). Re: Village of Ludlow, Declaratory Ruling #212 at 8 (December 29, 1989). In determining whether a potential for significant impacts exists, the inquiry has not been whether the impacts will occur, but whether they may occur. Re: Citv of Montpelier, Declaratory Ruling #190 at 7 (Sept. 6, 1988).

The Village argues that the proposed project is not a substantial change because it meets the elements of 10 V.S.A. § 6081(d) and (e). Specifically, with respect to subsection 6081(d), it argues that the proposed project is an "essential" municipal waterworks enhancement because: (1) the existing Village water treatment facility fails to meet federal standards for such facilities; (2) the existing Park Street and Demeritt wells are contaminated; and (3) the Vermont Department of Health is requiring the Village to take steps to remedy the situation. The Village also argues that the existing capacity of its system should be calculated based on the safe yield of the existing water supplies including the Park Street and Demeritt wells, and that the capacity of the system following the proposed project should be calculated without reference to those wells. Such a

calculation results in decreased capacity following project construction. Further, the Village argues that its replacement pipes fit the requirements of subsection (e) because that replacement will not change the capacity of the system.

Turning first to the pipe replacement, the Board concludes that it meets the elements of 10 V.S.A. § 6081(e). In particular, the Board believes that Subsection 6081(e) should be construed with reference to the capacity of the facility rather than the capacity of the pipes because the language of that subsection uses the phrase "capacity of the relevant facility." In this case, the replacement pipes will not expand the capacity of the Village water system.

With regard.to whether the remainder of the project meets the elements of 10 V.S.A. § 6081(d), the first issue is the essential nature of the proposed project. The construction of the new treatment plant is essential because the existing treatment plant does not meet current regulatory standards. The Village's drilling new wells is also essential for several reasons. First, the Tyler and Merriam Brook intakes will not be sufficient to meet future demand. Second, both the Park Street and Demeritt wells contain levels of contaminants above regulatory standards. Third, the Department has indicated that action must be taken or legal consequences will ensue.

Having determined that the new treatment plant and wells are essential, the Board turns to evaluating whether the capacity of the Village water system will change by less than 10 percent.

The Board believes that capacity must be evaluated in light of those factors which place limits on the ability of a system to deliver services. For example, a system's ability to deliver water may be limited by the capacity of available water sources. In another case, however, water delivery may be limited by the design capacity of the facility itself. In this matter, the Board concludes that at this time the limit on the Village water system is the capacity of its water sources. Accordingly, the Board evaluates the Village's capacity change with reference to the capacity of those sources. The fact that the proposed project includes a 50 percent storage capacity increase is therefore not determinative.

The Board considers the system's pre-construction source capacity to be 1,167,000 gpd, which includes the contaminated Park Street and Demeritt wells. The Board

considers the post-construction source capacity to be 1,068,360 gpd. This calculation excludes the contaminated Park Street and Demeritt wells. One reason for this conclusion is that the contaminated wells will be physically disconnected from the Village's system and therefore should no longer be considered part of the system. Further, the Village's purpose in adding new wells to the system is to use them instead of the older contaminated wells. While the contaminated wells might be used in an emergency for fire-flow, so might other sources, such as river water. Accordingly, the Board concludes that the proposed project does not change the capacity of the Village's system by more than ten percent, and thus is not a substantial change pursuant to 10 V.S.A. § 6081(d). The Board therefore does not reach the question of whether the proposed project has the potential for significant impacts.

The Board believes that the Village's post-construction capacity must be used as the yardstick to measure any future changes to the Village water system. For changes in source capacity, therefore, the capacity to be added by the changes must be measured against the post-construction capacity following the current project of 1,068,360 gpd. An Act 250 permit will be required prior to any change in system source capacity of more than ten percent of 1,068,360 gpd, including the reconnection of the Park Street and DeMerritt wells for use as drinking water, if the change has the potential for significant impacts.

Further, prior to changes in design capacity of the new treatment facility, an analysis will be necessary of whether design capacity has become the limiting factor of the Village's system. If so, the design capacity change will need to be measured against the proposed treatment plant's maximum capacity of 880,000 gpd. If the design capacity has become the limiting factor and will be increased by more than ten percent, an Act 250 permit will be required if the potential for significant impacts is present.

Prior to any future changes in the system, the Village is encouraged to seek an advisory opinion from the District Coordinator applying the parameters-outlined above.

F. Conclusion

The Board concludes that the, proposed project is not a development pursuant to 10 V.S.A. § 6001. The Board also concludes that the proposed project does not constitute a substantial change to a pre-existing development pursuant to 10 V.S.A. § 6081(d) and (e). Accordingly, an Act 250 permit is not required for the proposed project.

V. ORDER

An Act 250 permit is not required for the proposed improvements to the Village of Waterbury water system as described above.

Dated at Montpelier, Vermont this 5th day of February, 1991.

ENVIRONMENTAL BOARD

Stephen Reynes, Chairman
Ferdinand Bongartz
Elizabeth Courtney
Rebecca J. Day
Arthur Gibb
Samuel Lloyd
Charles F. Storrow
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